

PART I: THE CASE FOR INTEGRATION

CHAPTER 1: INTRODUCTION

1.A THE CORPORATE TAX: NEED FOR CHANGE

Issues

Current U.S. tax law treats corporations and their investors as separate taxable entities. Under this classical system of corporate income taxation, two levels of income tax are generally imposed on earnings from investments in corporate equity. First, corporate earnings are taxed at the corporate level. Second, if the corporation distributes earnings to shareholders, the earnings are taxed again at the shareholder level. In contrast, investors in business activities conducted in non-corporate form, such as sole proprietorships or partnerships, are generally taxed only once on the earnings, and this tax is imposed at the individual level. Corporate earnings distributed as interest to suppliers of debt capital also are taxed only once because interest is deductible by the corporation and generally taxed to lenders as ordinary income.

Despite its long history, considerable debate surrounds the role of the corporate income tax in the Federal tax structure. The central issue is whether corporate earnings should be taxed once rather than taxed both when earned and when distributed to shareholders. Integration of the individual and corporate income tax refers to the taxation of corporate income once. This Report discusses and evaluates several integration alternatives.¹

Despite their differences, the methods of integration studied in this Report reflect a common goal: where practical, fundamental economic considerations, rather than tax considerations, should guide business investment, organization, and financial decisions. The Tax Reform Act of 1986 (the 1986 Act)² made the tax system significantly more neutral in its impact on business decisions about capital investment by reducing tax rates and tax preferences. The 1986 Act,

however, did not address tax-related distortions of business organizational and financing decisions. In fact, the 1986 reforms may have increased the pressure to select noncorporate organizational forms by imposing a higher marginal rate on corporations than on individuals and by repealing the *General Utilities*³ doctrine, which had protected corporations from corporate level tax on liquidating dispositions of corporate assets. Corporate integration can thus be regarded as a second phase of tax reform in the United States, extending the goal of neutral taxation to the choice of business organization and financial policy.

The current two-tier system of corporate taxation discourages the use of the corporate form even when incorporation would provide nontax benefits, such as limited liability for the owners, centralized management, free transferability of interests, and continuity of life. The two-tier tax also discourages new equity financing of corporate investment, encourages debt financing of such investment, distorts decisions with respect to the payment of dividends, and encourages corporations to distribute earnings in a manner designed to avoid the double-level tax.

These distortions have economic costs. The classical corporate tax system reduces the level of investment and interferes with the efficient allocation of resources. In addition, the tax bias against corporate equity can encourage corporations to increase debt financing beyond levels supported by nontax considerations, thereby increasing risks of financial distress and bankruptcy.

Historically, the corporation has been an important vehicle for economic growth in the United States, but the classical corporate tax system often perversely penalizes the corporate form of organization. With the increasing integration of international markets for products and capital, one must consider effects of the corporate

tax system on the competitiveness of U.S. firms. Most of the major trading partners of the United States have revised their tax systems to provide for some integration of the corporate and individual tax systems.

This Report provides a comprehensive study of integration, including both the legal and economic foundations for implementing integration in the United States. We present three prototypes representing a range of integration systems and recommend two prototypes that implement our policy goals. One prototype, a dividend exclusion system, can be implemented with minimal changes to current law. The second, the Comprehensive Business Income Tax (CBIT), extends the dividend exclusion model to debt. CBIT achieves the important goal of equating the treatment of debt and equity, but because it represents a greater departure from current law, it would require a longer transition period. We have included, albeit with substantial reservations as to feasibility, a third prototype—a shareholder allocation system, often referred to as full integration. We considered it necessary to examine such a prototype because this system is so frequently viewed as ideal by proponents of integration, although we ultimately reject it on both policy and administrative grounds.

The Report also documents the substantial economic benefits of integration. We estimate that any of the three prototypes would increase the capital stock in the corporate sector by \$125 to \$500 billion and would decrease the debt to asset ratio in the corporate sector from 1 to 7 percentage points. Further, efficiency gains from integration would be equivalent to annual welfare gain for the U.S. economy as a whole of 0.07 to 0.7 percent of annual consumption (or \$2.5 to \$25 billion (in 1991 dollars)).⁴ See Chapter 13.

Brief Description of Current Law

Under current law, income earned by corporations is taxed at the corporate level, generally at a marginal rate of 34 percent.⁵ When the corporation distributes earnings to shareholders in the form of dividends, the income is generally taxed

again at the shareholder level.⁶ If corporations retain earnings, the value of their stock will generally increase to reflect those earnings. When shareholders sell their stock, gains from the sale are taxed also. Thus, like income distributed as dividends, retained corporate income generally is taxed twice. In contrast, investors who conduct business activity in noncorporate form, such as through a sole proprietorship or partnership, are taxed once on their earnings at their individual tax rate.

Dividends distributed to individual U.S. citizens and residents are taxed generally at marginal rates of 15, 28, or 31 percent.⁷ Dividends distributed to nonresident aliens and foreign corporations by U.S. corporations are generally subject to a nonrefundable "withholding" tax, currently set by statute at 30 percent. United States treaties with trading partners frequently reduce the rate to 15 or 5 percent on a reciprocal basis. Dividends received by U.S. corporate shareholders generally qualify for a dividends received deduction of 70, 80 or 100 percent, depending on the degree of affiliation between the corporations. Shareholders' gains from sales of corporate stock are taxed also, typically as capital gains, although capital gains of foreign shareholders generally are exempt from U.S. tax.

Unlike dividends, interest is generally deductible by corporations. Interest income received by domestic lenders is generally taxed at their marginal tax rates. Interest income received by foreign lenders from U.S. corporations, however, generally is not subject to U.S. tax.⁸

Tax-exempt entities supply a substantial portion of the corporate capital in the United States. These tax-exempt entities include pension funds and educational, religious and other charitable organizations. These entities are generally not taxed on interest, dividends or gains from the sale of their investments. However, the corporate level tax applies to corporate income attributable to the equity capital they supply. Tax-exempt entities may be subject to the unrelated business income tax (UBIT) on earnings from equity investments in partnerships.

1.B THE CORPORATE TAX AND ECONOMIC DISTORTIONS

The classical corporate income tax system distorts three economic and financial decisions: (1) whether to invest in noncorporate rather than corporate form, (2) whether to finance investments with debt rather than equity, and (3) whether to retain rather than distribute earnings. Apart from corporate and investor level tax considerations, nontax benefits and costs also influence these decisions. To the extent that the classical tax system distorts the choice of organizational form, financial structure, and dividend policy, economic resources can be misallocated.⁹

The Cost of Capital As a Measure of Investment Incentives

This Report examines distortions resulting from the corporate income tax in terms of effects on the cost of capital. In deciding whether to undertake an investment, firms require that the investment provide a sufficient after-tax return to compensate investors. The cost of capital is the pre-tax rate of return that is sufficient to cover operating expenses, taxes, economic depreciation, and the investor's required after-tax rate of return. Thus, the cost of capital depends in part on the return firms must pay to suppliers of debt or equity capital to attract funds. The cost of capital also depends on such factors as tax rates, the investment's economic depreciation rate, the capital cost recovery deductions allowed on the investment, the inflation rate, and the source of financing for the investment. Because a higher cost of capital makes certain investments unprofitable, corporate and individual income taxes reduce investment incentives by raising the cost of capital.

This section uses the cost of capital as a framework for analyzing the effects of the current classical corporate tax system on the business decisions described above (i.e., form of business organization, form of financing, and retention of earnings). The final part of this section discusses the effect of the corporate income tax on savings and investment in the economy as a whole.

Organizational Form

The waste of economic resources from tax-distorted misallocation of capital between the noncorporate and corporate sectors was the original focus of criticism of the corporate income tax. Beginning with Harberger,¹⁰ economists have argued that a classical corporate tax system misallocates capital between the corporate and noncorporate sectors. Over the years, more sophisticated models have been developed to examine more carefully the efficiency costs of corporate taxation. Contemporary approaches suggest that these costs are significant. See Chapter 13.

A simple example illustrates the effect of the current corporate tax system on investment decisions. Suppose that an investor requires an after-tax rate of return of 8 percent and the investor's effective tax rate is 20 percent. An equity investment in a noncorporate enterprise must earn a return high enough to pay tax at the investor's rate (20 percent) and still yield the required 8 percent after-tax return.¹¹ The noncorporate investment must therefore earn a 10 percent pre-tax rate of return (net of depreciation) in order to cover the investor's income taxes and meet the required return ($0.10 \times (1 - 0.20) = 0.08$). However, if the corporate tax rate is 34 percent and the corporation distributes all of its income, the cost of capital of an equity financed investment in the corporate sector in the above example is 15.2 percent. This 15.2 percent pre-tax return yields an 8 percent return after paying both the corporate tax and the investor level tax on dividends ($0.152 \times (1 - 0.34) \times (1 - 0.20) = 0.08$). Since fewer investments can earn the higher required return (15.2 percent as opposed to 10 percent), the corporate tax discourages investment in the corporate sector by raising the cost of capital.

More complex calculations support this result. For example, a Congressional Research Service report estimates, under realistic assumptions, the total effective Federal income tax rate on corporate equity (taking into account both corporate level and shareholder level taxes) to be 48 percent, compared to 28 percent for noncorporate

equity.¹² Therefore, some corporations fail to undertake investments that would be profitable if the tax burden on corporate and noncorporate investments were the same. Moreover, for some business enterprises, the added corporate taxes exceed the nontax benefits of incorporation, causing such businesses to forego those benefits and to operate instead in noncorporate form. Figure 1.1 illustrates the differences in taxation of equity investments in corporate and non-corporate businesses.

The bias against corporate sector investments compared with investments in the noncorporate sector reduces the productivity of the nation's capital investments and reduces potential national income. See Chapter 13. This reduction in productivity is a hidden cost of the corporate tax. In addition, the classical system encourages corporations to convert to noncorporate form, thereby abandoning the benefits of incorporation.¹³

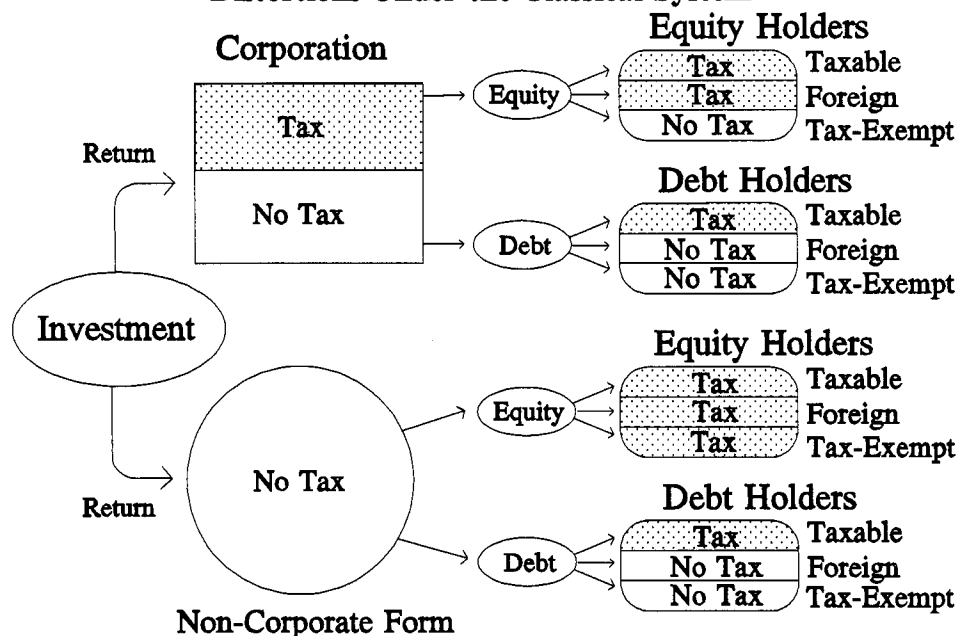
Certain tax provisions mitigate this tax bias against corporate investment. First, by using debt to finance investments, corporations can reduce

the relative tax advantage of noncorporate firms. Considering only tax costs, corporate and noncorporate entities face the same cost of debt financed capital, because interest paid is deductible. Thus, corporations can reduce the difference in tax burdens for total investment by financing new investment with debt. Increases in debt may, however, increase the risk of financial distress or bankruptcy. Second, accelerated cost recovery deductions provide, in effect, an interest-free government loan to finance new investment. These deductions lower the total cost of capital for both corporate and noncorporate firms, but because corporate tax rates generally exceed individual tax rates, corporations realize greater tax benefits from accelerated depreciation. Thus, such deductions reduce, but do not eliminate, the additional tax burden on corporate equity investments.

Corporations also can reduce the distortion between corporate and noncorporate investments by distributing corporate income to shareholders through share repurchases and other nondividend distributions. The advantage of a nondividend

distribution is that it allows shareholders to recover the cost (or basis) of their shares, with any excess generally taxed as capital gains. Current law provides a slight rate preference for capital gains of individuals (a maximum rate of 28 percent compared with a maximum of 31 percent on other income). Capital gains also benefit from the deferral permitted under current law, because shareholders do not recognize gain until stock is sold, and capital assets receive a tax-free step-up in basis at death. The preferential tax treatment of capital gains reduces, but does not eliminate,

Figure 1.1
Distortions Under the Classical System¹



¹The figure does not take into account tax preferences or taxes imposed by other countries.

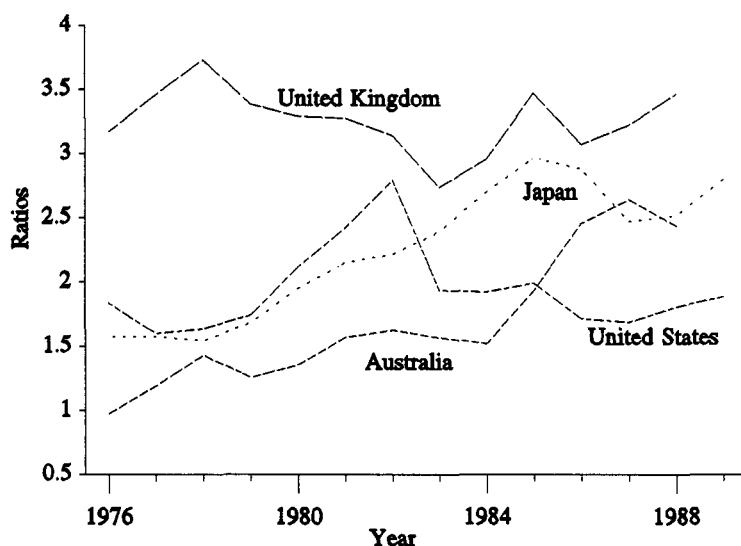
the distorting effect of the current corporate tax system on corporate level investment.

International comparisons add perspective on the effect of the corporate tax on the U.S. corporate sector. One measure is the ratio of corporate investment to investment in housing, which provides a comparison of resource allocation in different economies. Figure 1.2 presents the ratio of corporate gross fixed investment relative to private residential investment in the United States and three other industrialized countries for which data are available since 1976. Throughout the period, the United States had a lower ratio than the United Kingdom. Although the U.S. ratio exceeded that for Japan and Australia until the early 1980s, corporate investment relative to housing investment has tended upwards over the whole period for Japan and Australia while the ratio for the United States has remained fairly stable, except for the 2 years following the Economic Recovery Tax Act of 1981. Indeed, for the last 4 years for which data are available, the United States has had essentially the lowest corporate investment per dollar of housing investment of any of the four nations. A similar picture

of relatively low corporate investment in the United States is depicted in Figure 1.3, which presents the ratio of investment (net of depreciation) in the corporate sector relative to the total noncorporate sector (households and unincorporated businesses combined) during the same period for the same four countries plus France. By this measure, the United States had the lowest ratio of corporate to noncorporate investment during the last 3 years for which data are available for any of the five nations.

Another useful international comparison is the spread between the pre-tax return on corporate investment and the cost of funds in the United States and other countries. This spread, or corporate "tax wedge," generally depends upon the type of asset acquired, the corporate tax rate, the capital recovery allowances, the rate of inflation, and various other country specific factors. Table 1.1 presents a listing of preliminary OECD calculations of the 1991 corporate tax wedge based on a standardized mix of assets and sources of funding for a manufacturer located in several OECD member countries. According to these data, the corporate tax wedge in the United States is higher than in France or Germany, is approximately the same as in the U.K., and is lower than the tax wedge in Canada and Japan.

Figure 1.2
Ratio of Corporate Investment Relative to Residential Investment in Four Countries, 1976-1989



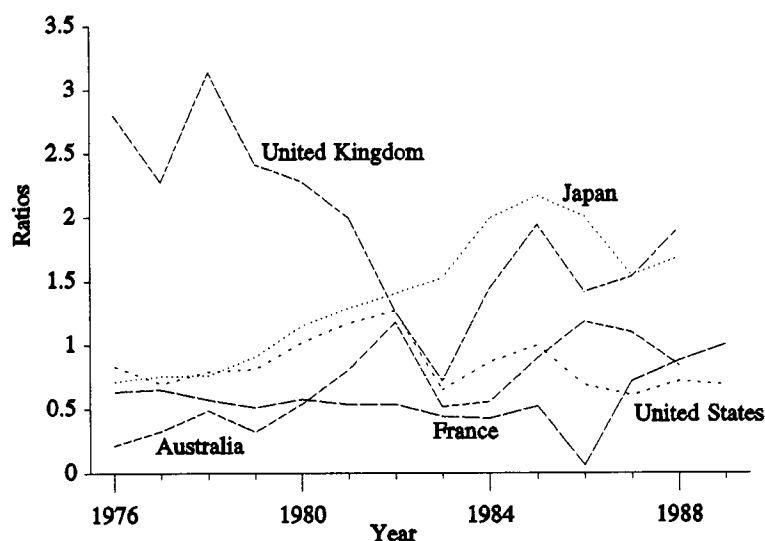
Source: Organisation for Economic Co-operation and Development, National Accounts (1976-1989).

Corporate Capital Structure

Corporations have three alternatives for financing new investments: (1) issuing new equity, (2) using retained earnings, or (3) issuing debt. There can be important nontax benefits and costs of alternative corporate financing arrangements, and the tax system should avoid prejudicing financial decisions.

The current classical corporate tax system discriminates

Figure 1.3
Ratio of Corporate Investment Relative to
Noncorporate (including Household) Investment
in Five Countries, 1976-1989



Source: Organisation for Economic Co-operation and Development, National Accounts (1976-1989).

Table 1.1
Corporate Tax Wedges for
New Investments in Manufacturing
1991

Country	Corporate Tax Wedge ¹
Canada	1.2
France	0.4
Germany	0.6
Japan	1.4
United Kingdom	0.9
United States	0.8

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¹The difference between the pre-corporate tax real rate of return and 5 percent (the real interest rate). The calculations assume no personal taxes and an inflation rate of 4.5 percent for all countries. The weights for the proportion of investment in each type of asset and the proportion of finance from each source of funds are assumed to be the same for each country: 50 percent for machinery, 27 percent for buildings, and 23 percent for inventories and 35 percent for debt, 10 percent for new equity, and 55 percent for retentions.

Source: Organisation for Economic Co-operation and Development, preliminary unpublished estimates.

against equity financing of new corporate investment. See Figure 1.1. Because of the two levels of taxation of corporate profits, the cost of equity capital generally exceeds the cost of debt capital. The Congressional Research Service estimates, under realistic assumptions, the total effective Federal income tax rate on corporate debt to be 20 percent, compared with 48 percent for corporate equity.¹⁴ Moreover, the total effective tax rate on debt can be negative. The lower effective tax rate for debt financed corporate investment than for equity financed corporate investment encourages the use of debt by corporations, assuming nontax factors that affect financing decisions do not change.

If a corporation borrows from an individual to finance an investment, the corporation deducts the interest payments from its taxable income and is therefore not taxed on the investment's pre-tax return to the extent of interest payments, although the lender is taxable on the interest at the individual tax rate.¹⁵ Consequently, to the extent that corporations finance investment with debt, current law does not distort the choice between investment in the corporate and noncorporate sectors. Using the assumptions in the numerical example set forth under "Organizational Form," above, for a 100 percent debt financed corporate

investment, the cost of capital is 10 percent ($0.10 \times (1 - 0.2) = 0.08$, the required rate of return). This cost is well below the 15.2 percent cost of capital for equity financed investments for corporations that distribute income as dividends, and is the same as the cost of capital for a non-corporate investment.

Recent Trends in Corporate Debt

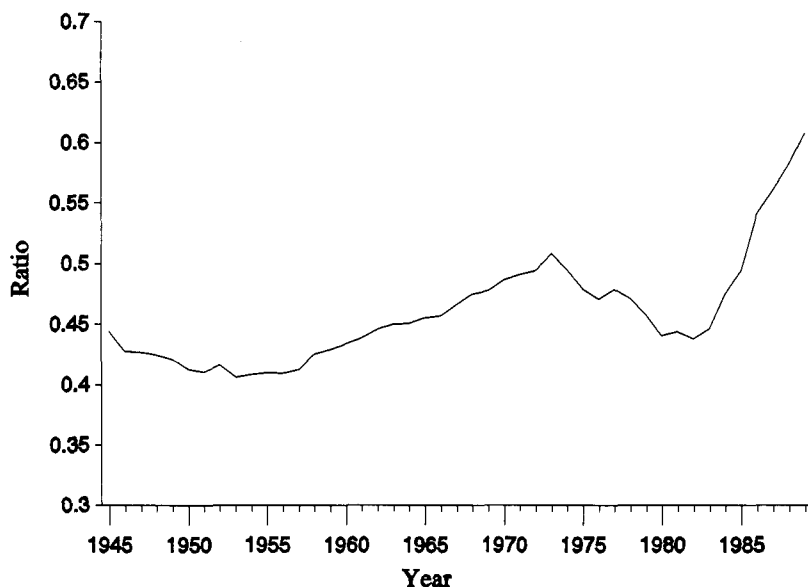
Historical data show U.S. corporate debt to be at relatively high levels by postwar standards, with some, but not all, measures growing at an unusually rapid pace in the 1980s. Because there is no single, universally agreed-upon measure of debt, the discussion below considers trends based on alternative measures.

One group of debt measures focuses on corporate balance sheets: the ratio of debt to total assets. The debt to asset ratio can be computed using either book value (the par value of debt and the historical cost of assets as reported for financial accounting purposes) or market value. Figure 1.4 displays one book value measure, the

ratio of credit market debt to the book value of tangible assets for nonfinancial corporations, based on Federal Reserve Board data. This ratio grew from 43 percent in 1948 to 61 percent in 1989. Although the ratio generally increased over the postwar period, it declined sharply beginning in 1975 and continuing through the mid 1980s. Following that decrease, the ratio began to rise again and by 1989 had reached a postwar high of 61 percent. In 1989, this book-value debt to asset ratio was more than 17 percentage points higher than in 1980, but only 10 percentage points higher than the pre-1980s peak of 51 percent reached in 1973.

Figure 1.5 presents Federal Reserve Board data showing the ratio of the market value of debt to the market value of the firm (debt plus equity) for nonfinancial corporations from 1961 through 1989. Like the book-value measure, the market-value ratio indicates that corporate debt has generally increased since 1961. In 1961, debt represented 26 percent of the total market value of the capital stock of nonfinancial corporations compared to 38 percent of total market value in 1989. The market-value data, however, suggest that the dramatic increase in corporations' use of debt occurred in the middle 1970s. Indeed, the market-value ratio peaked at 47 percent in 1974, a year in which the stock market fell sharply. During the 1980s, the market-value ratio does not show a discernible upward trend because rising stock market prices largely offset the growth in the dollar amount of debt during this period. In contrast, the book-value measure described in the preceding paragraph shows a large increase during the 1980s, because stock market growth is not reflected directly in the book-value measure, and thus does not offset the rising dollar volume of debt.¹⁶

Figure 1.4
Ratio of Credit Market Debt to the
Book Value of Tangible Assets
Nonfinancial Corporations

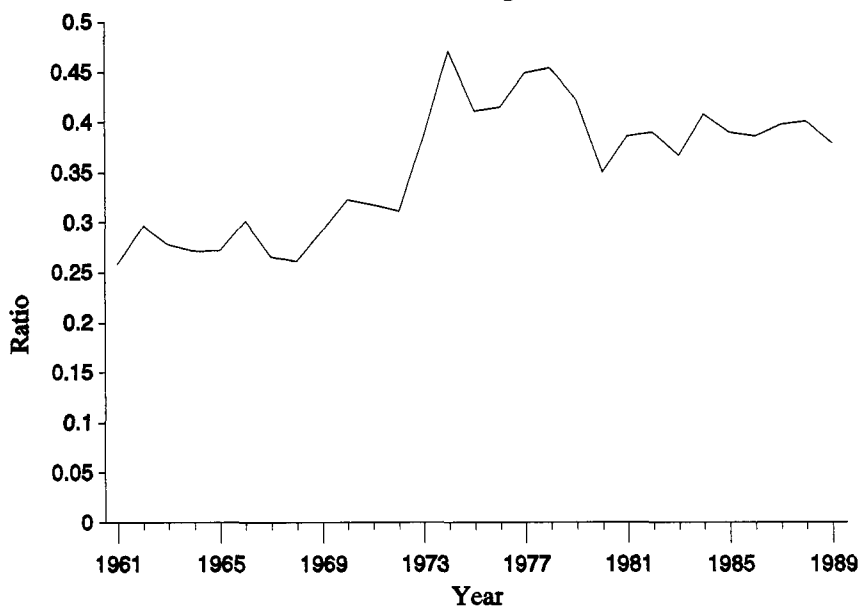


Source: Federal Reserve Board, *Flow of Funds Accounts* (various issues).

A second measure of leverage focuses on the importance of debt in corporations' sources of additional funds rather than corporations' total outstanding debt. See Table 1.2. Over the entire postwar period, equity finance was dominant. For nonfinancial corporations, retained earnings and net new equity issues accounted for roughly 78 percent of funds raised. Debt provided the balance, divided about equally between private issues (bank loans and private placements) and public issues (bonds). Relative financing patterns changed during the 1980s. While corporations continue to rely heavily on retained earnings, they have sharply adjusted the composition of external finance. Most notably, corporations have undertaken substantial repurchases of equity, financed mainly with debt.¹⁷ In (current) dollar terms, this pattern is illustrated in the left panel of Figure 1.6. The increase in nonfinancial corporate debt during the early and middle 1980s was largely matched by a reduction in outstanding equity. As shown in the right panel of Figure 1.6, nonfinancial corporations relied significantly more on internal funds (retained earnings) during the 1980s than was the case for the postwar period as a whole.

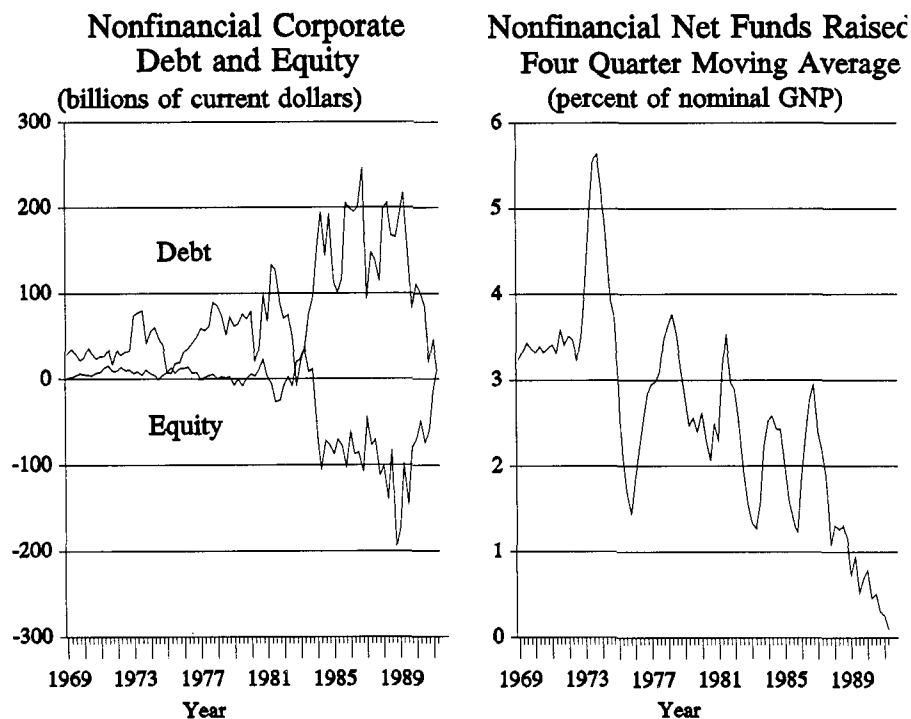
Recent evidence suggests that share repurchases have contributed to the increase in

Figure 1.5
Ratio of Market Value of Debt to
Market Value of the Firm
Nonfinancial Corporations



Source: Federal Reserve Board, unpublished estimates.

Figure 1.6
Changing Sources of Funds for the Corporate Sector



Source: Strongin (1991).

Table 1.2
Sources of Funds, Nonfinancial Corporations, 1946-1990

Year	Amount (millions of dollars)				Shares			
	Internal	New Debt	Net New	Total	Internal	New Debt	Net New	
	Funds	Issues	Equity Issues	Funds	Funds	Issues	Equity Issues	
1946	\$8,503	\$6,103	\$1,018	\$15,624	54.4%	39.1%	6.5%	
1947	13,335	7,306	1,093	21,734	61.4%	33.6%	5.0%	
1948	19,651	6,398	1,000	27,049	72.6%	23.7%	3.7%	
1949	20,024	1,826	1,212	23,062	86.8%	7.9%	5.3%	
1950	18,539	6,772	1,288	26,599	69.7%	25.5%	4.8%	
1951	20,761	8,770	2,107	31,638	65.6%	27.7%	6.7%	
1952	22,457	6,852	2,320	31,629	71.0%	21.7%	7.3%	
1953	22,334	4,022	1,766	28,122	79.4%	14.3%	6.3%	
1954	24,403	4,714	1,583	30,700	79.5%	15.4%	5.2%	
1955	29,943	8,557	1,719	40,219	74.4%	21.3%	4.3%	
1956	30,045	10,397	2,250	42,692	70.4%	24.4%	5.3%	
1957	31,983	9,587	2,441	44,011	72.7%	21.8%	5.5%	
1958	30,659	8,395	1,968	41,022	74.7%	20.5%	4.8%	
1959	36,434	10,150	2,078	48,662	74.9%	20.9%	4.3%	
1960	35,842	9,976	1,365	47,183	76.0%	21.1%	2.9%	
1961	36,895	9,853	2,121	48,869	75.5%	20.2%	4.3%	
1962	43,219	12,591	369	56,179	76.9%	22.4%	0.7%	
1963	46,967	12,245	(341)	58,871	79.8%	20.8%	-0.6%	
1964	52,309	12,667	1,145	66,121	79.1%	19.2%	1.7%	
1965	59,098	18,931	(28)	78,001	75.8%	24.3%	-0.0%	
1966	63,274	23,451	1,259	87,984	71.9%	26.7%	1.4%	
1967	64,250	24,924	2,397	91,571	70.2%	27.2%	2.6%	
1968	65,766	27,677	(159)	93,284	70.5%	29.7%	-0.2%	
1969	65,195	28,995	3,406	97,596	66.8%	29.7%	3.5%	
1970	62,693	28,484	5,694	96,871	64.7%	29.4%	5.9%	
1971	74,614	25,986	11,435	112,035	66.6%	23.2%	10.2%	
1972	86,214	31,463	10,922	128,599	67.0%	24.5%	8.5%	
1973	93,704	68,439	7,883	170,026	55.1%	40.3%	4.6%	
1974	88,972	50,835	4,097	143,904	61.8%	35.3%	2.8%	
1975	124,249	13,171	9,908	147,328	84.3%	8.9%	6.7%	
1976	141,272	40,138	10,524	191,934	73.6%	20.9%	5.5%	
1977	164,401	66,695	2,727	233,823	70.3%	28.5%	1.2%	
1978	181,914	70,970	(101)	252,783	72.0%	28.1%	-0.0%	
1979	197,206	68,142	(7,836)	257,512	76.6%	26.5%	-3.0%	
1980	199,772	58,206	10,375	268,353	74.4%	21.7%	3.9%	
1981	239,098	104,085	(13,450)	329,733	72.5%	31.6%	-4.1%	
1982	241,901	46,567	1,900	290,368	83.3%	16.0%	0.7%	
1983	285,217	56,521	20,000	361,738	78.8%	15.6%	5.5%	
1984	335,885	170,828	(78,975)	427,738	78.5%	39.9%	-18.5%	
1985	351,815	134,260	(84,500)	401,575	87.6%	33.4%	-21.0%	
1986	344,294	209,718	(84,975)	469,037	73.4%	44.7%	-18.1%	
1987	372,448	123,749	(75,500)	420,697	88.5%	29.4%	-17.9%	
1988	391,371	184,633	(129,500)	446,504	87.7%	41.4%	-29.0%	
1989	380,010	159,537	(124,150)	415,397	91.5%	38.4%	-29.9%	
1990	369,458	86,186	(63,000)	392,644	94.1%	22.0%	-16.0%	

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Office of Tax Policy

Source: Federal Reserve Board, Flow of Funds Accounts (various issues).

corporate debt. Rather than simply replacing dividends, repurchases have been financed primarily by debt, which results in higher interest costs.¹⁸ Increased share repurchases, therefore, accounts for part of the recent increases in net interest payments, and may be viewed as one method that firms have used to reduce their corporate tax liabilities. Table 1.3 presents estimates of the portion of net interest payments of nonfinancial corporations that might be attributable to "excess" share repurchases of the 1980s, where the excess is the difference between actual repurchases and the levels that would have occurred if the ratio of repurchases to dividends had continued at its average for the 1970s.¹⁹ The table shows that, by 1990, over one quarter of the interest payments of nonfinancial corporations was attributable to increased share repurchases.²⁰

A third measure of corporate debt focuses on the ability of corporations to service their debt. Corporations meet their interest payments out of the cash available after other payments, such as those for labor, materials, energy, and taxes. Cash flow, calculated as after-tax profits plus depreciation, serves as a measure of funds from which a corporation can cover its interest payments. Figure 1.7 shows the ratio of net interest to cash flow for nonfinancial corporations from 1948 through 1990. These data show a generally upward trend over time with substantial increases in the late 1960s and early 1970s, again in the early 1980s, and in the last 2 years (1989 and 1990). After reaching 19 percent in 1982, the ratio of net interest to cash flow showed little upward movement through 1988 but has increased in 1989 and 1990. By 1990, it reached a postwar high of 19 percent. Firm level data document a similar pattern.²¹

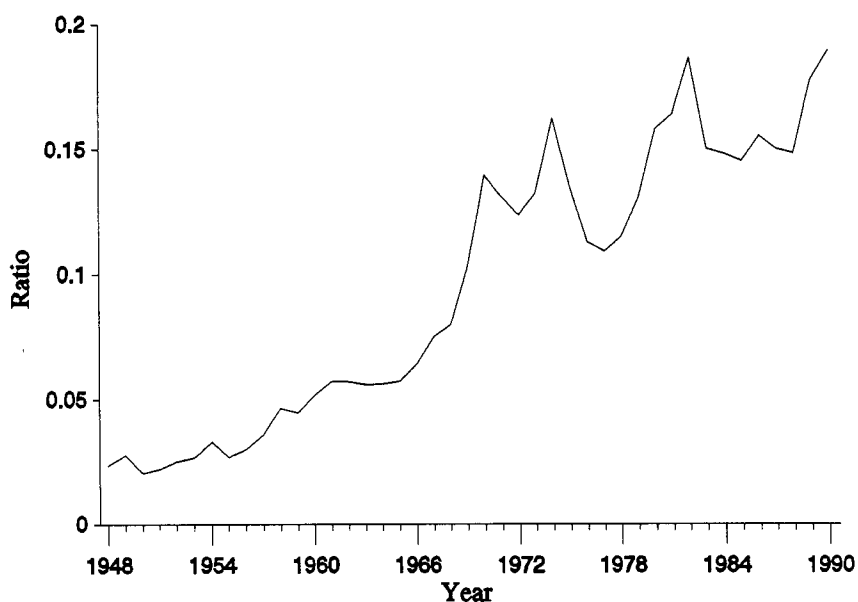
Table 1.3
Estimates of Maximum Amount of
Interest Attributable to
Increased Share Repurchases
1980-1990

Year	Percentage of Net Interest of Nonfinancial Corporations
1980	1.0
1981	0.9
1982	1.3
1983	1.8
1984	5.4
1985	11.2
1986	12.4
1987	18.2
1988	23.6
1989	23.4
1990	25.5

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Source: Office of Tax Policy calculations based on Standard and Poor's COMPUSTAT data and on information in Poterba (1987).

Figure 1.7
Ratio of Net Interest to Cash Flow, 1948-1990
Nonfinancial Corporations



Sources: Department of Commerce (1986) and Department of Commerce, *Survey of Current Business* (July, various years).

Some economists also are concerned that high debt-service burdens (by postwar standards) during the 1980s have been associated with an increase in corporate bankruptcies. While bankruptcies followed a cyclical pattern over most of the postwar period, they remained high (relative to postwar standards) throughout the expansion following the 1981-1982 recession.²²

Benefits and Costs of Corporate Debt

Debt finance may have nontax benefits. Analysts most sanguine about high levels of corporate debt and debt-service burdens typically maintain that the discipline of debt is desirable because it gives lenders indirect means to monitor the activities of managers. This need for supervision owes to the separation between ownership and management that is characteristic of the traditional corporate structure.²³

A disadvantage of higher debt levels is that they can increase nontax costs of debt, including costs associated with financial distress. Even when corporations avoid formal bankruptcy proceedings, they incur costs when they cannot meet their interest obligations or when debt covenants restrict operating flexibility. The costs include extra demands on executives' time, supply disruptions, declines in customers' confidence, and, frequently, significant legal fees. Corporations therefore must evaluate the tax and nontax benefits of additional debt relative to these costs. Tax-induced distortions in capital structure can entail significant efficiency costs.²⁴

Corporate Dividend Distributions

The current system of corporate taxation also may distort a corporation's choice between distributing or retaining earnings and, if amounts are distributed, whether they are paid in the form of a nondividend distribution, such as a share repurchase. Differences in effective tax rates on dividends and retained earnings are significant.²⁵

Assessing the efficiency costs of such tax differentials requires an analysis of motives for corporate dividend distributions in the presence of

relatively high taxes on such dividends compared to capital gains. This Report assumes that corporate dividends offer special nontax benefits to shareholders that offset their tax disadvantage,²⁶ and, accordingly, that corporations set dividend payments so that the incremental nontax benefit of dividends paid equals their incremental tax cost. Under this assumption, the amount of dividends paid out is expected to decrease as the tax burden on dividends relative to capital gains increases; empirical studies are consistent with this prediction.²⁷ Investor level taxes on dividends also raise the cost of capital (and thereby reduce investment) to the extent that corporations pay out earnings as dividends. Thus, under the assumptions used in this Report, dividend taxes reduce the payout ratio and real investment incentives.

The growth in share repurchases in the last decade supports this view of the linkage between the corporate tax and corporate dividends. Share repurchases provide a means of distributing corporate earnings with, in many cases, more favorable shareholder level tax treatment than dividend distributions. While a shareholder pays tax on the full amount of a dividend at ordinary income rates, the shareholder generally pays tax on the proceeds of a share repurchase only to the extent they exceed share basis and, in some cases, at a preferential capital gains rate. Share repurchases increased substantially from 1970 to 1990, growing from \$1.2 billion (or 5.4 percent of dividends) to \$47.9 billion (or 34 percent of dividends), and peaking in 1989 at \$65.8 billion (or 47 percent of dividends).²⁸

Savings and Investment

The corporate tax increases the tax burden on the returns from saving and investing. The magnitudes of tax-induced distortions of investment and savings decisions depend on two factors: the size of the spread (or wedge) between pre-tax and after-tax returns and the responsiveness of savers and investors to changes in after-tax returns. The more responsive savers and investors are to changes in rates of return, the larger the effect of a tax wedge of a given size.²⁹ The Report documents significant wedges between pre-tax and

after-tax returns to saving and investment. While empirical evidence on the effect of changes in the after-tax return on savings is in conflict, there is substantial empirical evidence documenting important effects of capital taxation on investment.³⁰ See Chapter 13.

In the presence of international capital flows, the U.S. corporate income tax can reduce incentives to invest in the United States, even if it has a relatively small effect on saving by U.S. citizens.

1.C NEUTRALITY AS THE GOAL OF INTEGRATION

Integration would reduce and in some cases eliminate the distortions of business decisions under the current tax system by coordinating the individual and corporate income tax systems so corporate income is taxed only once. Broadly speaking, corporate tax integration seeks to reduce tax-induced distortions in the allocation of capital by taxing corporate income once, rather than zero, once, or multiple times as under the current regime. Integration has attracted the attention of tax policymakers for many years. The Department of the Treasury and the Congress have considered integration on several occasions, most recently in 1984 and 1985.³¹ Many industrial countries have long had integrated systems; several others have recently adopted integration.³²

The classical system of corporate taxation is inefficient because it creates differences in the taxation of alternative sources of income from capital. Under the classical system, a taxpayer conducting business in corporate form faces a different tax burden on equity financing than a taxpayer conducting the same business in non-corporate form. A corporation that raises capital in the form of equity faces a different tax burden than a corporation that raises the same amount of capital from debt. A similar disparity exists in the treatment of corporations that finance with retained earnings and those that pay dividends and finance with new equity. This Report provides evidence that these distortions impose significant economic costs, including reduced financial

flexibility of corporations and an inefficient allocation of capital.

A traditional goal of integration proposals has been to tax corporate income only once at the tax rate of the shareholder to whom the income is attributed or distributed.³³ Under the traditional approach, corporate income ideally would be taken into account when earned in determining each individual's economic income and would be taxed at each individual's marginal tax rate.³⁴ To illustrate, assume that a corporation has \$100 of income on which it pays \$34 in corporate tax. The corporation's shareholder has a marginal rate of 28 percent. Traditional proposals would typically treat the shareholder as having received income of \$100, but credit the shareholder with a tax payment of \$34. Since the shareholder owes only \$28 in tax on \$100 of income, traditional proposals typically provide that the shareholder is entitled to a \$6 refund or credit against other taxes.

Assuring that corporate income is taxed once, but only once, does not require that corporate income be taxed at individual rates, however. Attaining a single level of tax—with the most significant efficiency gains we project from any system of integration—can be achieved with a schedular system in which all corporate income is taxed at a uniform rate at the corporate level without regard to the tax rate of the corporate shareholder. Under the current rate structure, in which the corporate rate is slightly higher than the maximum individual rate, there seems little reason to tax corporate income at shareholder rates. In contrast, an integration proposal developed in the late 1970s, when the maximum individual rate on capital income of 70 percent exceeded the corporate rate of 46 percent, might well have required taxation at shareholder rates in order to prevent avoidance of the higher shareholder rates.³⁵

Neutral taxation of capital income will reduce the distortions under the current system.³⁶ Economic efficiency suggests that all capital income should be taxed at the same rate. Accordingly, we place less emphasis than some advocates of integration on either trying to tax corporate

income at shareholder tax rates or on simply trying to eliminate one level of tax on distributed corporate income.

The prototypes advanced in this Report use the corporation not as a withholding agent for individual shareholders (which implies ultimate taxation at shareholder rates), but rather as a means of collecting a single level of tax on capital income at a uniform rate. Nevertheless, Chapter 3 discusses a shareholder allocation prototype, which closely resembles the traditional passthrough methods of integration. We do not recommend adopting shareholder allocation, but it illustrates the problems presented by an integration mechanism that imputes corporate income to shareholders and taxes it at individual rates.

A decision to adopt a schedular system for taxation of business capital is not irreversible. Future policymakers can, if they wish, add refund and crediting mechanisms to achieve the traditional objective of taxing corporate income at the individual shareholder's marginal rate, or they can address the issue by adjusting the corporate rate to more precisely approximate individual rates.³⁷ Our judgment is that neither of these courses is necessary to achieve the principal benefits of an integrated tax system. They are options that can be added once the complexities of transition have been mastered. Deferring them makes the integration prototypes examined in this Report simpler to implement and conserves revenues.

We approach integration primarily as a means of reducing the distortions of the classical system and improving economic efficiency. This Report's emphasis on enhancing neutrality in the taxation of capital income can be summarized in four goals for the design of an integrated tax system:

- Integration should make more uniform the taxation of investment across sectors of the economy. The U.S. corporate system discourages investment in the corporate sector relative to investment in the noncorporate sector and owner-occupied housing.

That is, current law results in too little capital in the corporate sector relative to that elsewhere in the economy. Integration seeks to reduce this distortion.

- Integration should make more uniform the taxation of returns earned on alternative financial instruments, particularly debt and equity. The U.S. corporate tax system discourages corporations from financing investments with equity as opposed to debt. Such a system violates the goal of neutral taxation. Although equalizing the tax treatment of debt and equity need not be the overriding goal of integration, equal treatment follows from the goal of attaining neutral taxation of capital income.
- Integration should distort as little as possible the choice between retaining and distributing earnings. The U.S. corporate system discourages the payment of dividends and encourages corporations to retain earnings or to make nondividend distributions.
- Integration should create a system that taxes capital income once. Imposing double or triple taxation on some forms of capital income while not taxing others violates the objective of achieving neutrality between corporate and noncorporate forms of investment.

Integration is not a cure-all. Even an integrated system cannot attain complete neutrality with respect to the taxation of capital income. One reason is that integration fails to address an important category of tax distortions: distortions in allocating investment capital among assets. These inter-asset distortions are important, and reducing such distortions was an important impetus and goal of the 1986 Act. Because a corporate income tax per se does not cause inter-asset distortions, this Report does not directly address them.³⁸

The integration prototypes analyzed in this Report are income tax systems. The Report does not consider non-income tax reform of corporate taxation. For example, some economists have advocated a corporate cash-flow tax.³⁹ In 1984, the Department of the Treasury rejected substitution of a consumption-based tax for the income tax,⁴⁰ and in the 1986 Act, Congress moved decisively

in the direction of strengthening the individual income tax. So long as the individual tax base is income, we do not believe a corporate cash-flow tax would enhance the neutral treatment of capital income relative to the reforms discussed here.

Revenue concerns also may prevent integration from fully equalizing the taxation of alternative investments. Some integration proposals would reduce government revenue from income taxes. Lost tax revenue must be made up either by increasing other taxes or by reducing government spending. Replacement taxes may create distortions and alter the distribution of tax burdens. See Chapter 13.

Finally, integration does not directly address the general question of whether the overall tax rate on capital income, and hence the overall cost of capital, is too high. If integration eliminates double taxation of corporate source income, the overall tax rate on capital income would fall, other things being the same. Integration must be financed, however, and taxes on other types of capital income might rise. Thus, integration primarily focuses on improving the allocation of the Nation's capital stock, but not necessarily on reducing the overall tax rate on capital income. As Chapter 13 documents, the benefits associated with such improvements are nonetheless substantial.